REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-3, 5-8, and 10-16 are currently pending in this application. Claims 1, 5, and 10 are independent. The remaining claims depend, directly or indirectly, from independent claims 1, 5, and 10.

Amendments to the Specification

The specification has been amended to spell out the acronym "SCD." Applicants assert that no new matter is added by way of the amendments made to the Specification, as the meaning of the acronym SCD is one that those skilled in the art would readily appreciate, given the benefit of the disclosure of the original Specification.

Claim Amendments

The independent claims have been amended to clarify the meaning of the phrase "derivative power value." Specifically, the independent claims now recite that the derivative power value is a difference between two particular associated power values in the simulation. Applicant asserts that no new subject matter is added by way of these amendments. Support for these amendments may be found, for example, in paragraph [0017] of the Specification.

Rejections under 35 U.S.C. § 112

Claims 1-3, 5-8, 10, 11, and 14-16 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. To the extent that this rejection m ay still apply, this rejection is respectfully traversed.

The Examiner asserts that the "single cycle derivation" limitation recited in the claims is absent from the original disclosure (*see* Office Action mailed December 27, 2006, page 2). As described above, the Specification has been amended to explicitly recite the meaning of the acronym SCD as one skilled in the art would readily appreciate. Thus, the claims are fully supported by the Specification. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 14-16 stand rejected under stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

The Examiner asserts that the acronym "SCD" is undefined within the original disclosure. As described above, the specification has been amended to explicitly recite the meaning of the acronym "SCD" as one skilled in the art would readily appreciate. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 1-3, 5-8, 10, 11, 14, 15, and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by "Effects of Delay Models on Peak Power Estimation of VLSI Sequential Circuits" by Hsiao, IEEE 1997 ("Hsiao"). To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

The amended independent claims of the present invention recite, in part, "wherein the summary data includes at least one type of data selected from single-cycle summary data

configured to report a peak single cycle derivative power value, wherein a derivative power value is a difference between two particular associated power values in the simulation, multi-cycle summary data configured to report a peak average power value over multiple cycles, and multi-cycle derivative data configured to report a peak derivative power value over multiple cycles."

Turning to the rejection of the claims, for anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. The Applicant respectfully asserts that Hsiao does not disclose or suggest single-cycle or multi-cycle derivative value as recited in the amended independent claims.

Hsiao relates to estimating peak power in a circuit that includes gate delays (*see* Hsiao, Abstract). Although Hsiao discloses peak power values taken in a single cycle and during n-cycles (multiple cycles) (*see* Hsiao, page 46, left column), Hsiao is completely silent with respect to reporting summary data that includes peak or average power values calculated using single-cycle or multi-cycle *derivative power values*.

Specifically, the Examiner asserts that the Office interpreted "single cycle derivative" as finding power under different or derived delay assumptions" (*see* Office Action mailed December 27, 2006, page 4). This is incorrect. As recited by the amended independent claims, a derivative power value is a power value obtained by taking the *difference* between two associated power values obtained from the simulation. Thus, a single-cycle derivative power value is a value obtained by taking the difference between two associated power values obtained from the simulation of a single cycle (*see* Specification, paragraph [0017]). Similarly, multi-cycle derivative data is power data obtained by taking the difference between two power values over multiple cycles (*see* Specification, paragraph [0019]).

The cited portion of Hsiao discloses "the estimate for peak power dissipation can be used as a lower-bound for worst-case power dissipation in the circuit in any given time frame. Our goal in this work is to find and compare such bounds for the peak power dissipation of a circuit under different delay assumptions" (*see* Hsiao, page 46, right column, the last two lines of the second paragraph). However, as described above, derivative power values are obtained by computing a difference between two power values obtained from simulation data. The derivative power values recited in the amended independent claims of the present invention have *nothing to do with delay assumptions*.

In view of the above, it is clear that Hsiao fails to disclose or suggest single-cycle or multi-cycle derivative power values as recited in the amended independent claims. Thus, amended independent claims 1, 5, and 10 are patentable over Hsiao. Dependent claims 2-3, 6-8, 11, 14, 15, and 16 are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 12 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hsiao in view of "Gate-Level Power and Current Simulation of CMOS Integrated Circuits" by Bogliolo, 1997 ("Bogliolo"). To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

As described above, Hsiao fails to disclose or suggest the limitations of amended independent claim 10. Further, Bogliolo fails to supply that which Hsiao lacks, as evidenced by the fact that the Examiner relies on Bogliolo solely for the purpose of disclosing ratios and thresholds (*see* Office Action mailed December 27, 2006, page 10). In view of the above, it is clear that amended independent claim 10 is patentable over Hsiao and Bogliolo, whether considered
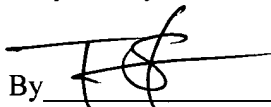
separately or in combination. Dependent claims 12 and 13, which depend indirectly from amended independent claim 10, are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 03226/073001).

Dated: March 20, 2007   Respectfully submitted,

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